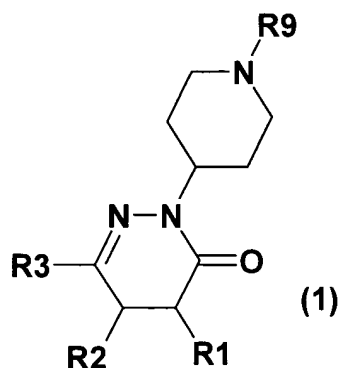


Appendix A

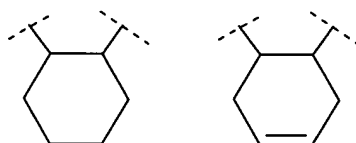
Claim Amendments

1. (Currently amended) A compound of formula 1

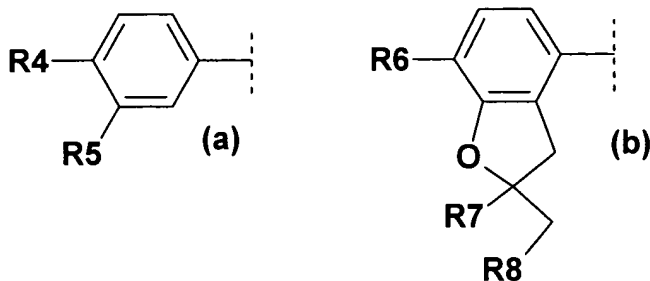


in which

R1 and R2 represent independently from one another hydrogen or 1-4C-alkyl, or R1 and R2 together, and with inclusion of the two carbon atoms to which they are bonded, form a group selected from



R3 represents a phenyl derivative of formulae (a) or (b)



wherein

R4 is 1-4C-alkoxy or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R5 is 1-8C-alkoxy, 3-7C-cycloalkoxy, 3-7C-cycloalkylmethoxy, or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R6 is 1-4C-alkoxy, 3-5C-cycloalkoxy, 3-5C-cycloalkylmethoxy, or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R7 is 1-4C-alkyl and

R8 is hydrogen or 1-4C-alkyl,

or wherein

R7 and R8 together, and with inclusion of the two carbon atoms to which they are bonded, form a spiro-linked 5-, 6- or 7-membered hydrocarbon ring, optionally interrupted by an oxygen or sulfur atom,

R9 is Aryl1, Aryl2 substituted by R10 and R11, $-(CH_2)_n-$
 $C(O)-R12$, $-C(O)-(CH_2)_m-R13$, $-(CH_2)_p-R14$ or $-Y-(CH_2)_q-Z-$
 $(CH_2)_r-R16$,

wherein

Aryl1 is naphthyl, pyrazinyl, pyridazinyl, pyrimidin-4-yl,
 pyrimidin-5-yl, quinazolinyl, quinoxalinyl, cinnolinyl,
 quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl,
 isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl,
 pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl,
 benzimidazolyl, oxazolyl, isoxazolyl, isothiazolyl,
 pyrrolyl, pyrazolyl or thiophenyl,

Aryl2 is naphthyl, pyridyl, pyrazinyl, pyridazinyl,
 pyrimidinyl, quinazolinyl, quinoxalinyl, cinnolinyl,
 quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl,
 isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl,
 pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl,
 benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl,
 isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl
 or thiophenyl,

R10 is halogen, nitro, cyano, carboxyl, 1-4C-alkyl,
 trifluoromethyl, 1-4C-alkoxy, 1-4C-alkoxy which is
 completely or predominantly substituted by fluorine, 1-

4C-alkoxycarbonyl, amino, mono-or di-1-4C-alkylamino, aminocarbonyl, 1-4C-alkylcarbonylamino or mono-or di-1-4C-alkylaminocarbonyl,

R11 is hydrogen, halogen, amino, nitro, 1-4C-alkyl or 1-4C-alkoxy,

R12 is 4H-benzo[1,4]oxazin-3-one-6-yl, Aryl2 or Aryl2 substituted by R10 and R11,

R13 is 1-4C-alkoxy, phenoxy, naphthalenoxy or 2-oxo-1,2-dihydro-quinolin-6-yloxy,

R14 is Aryl3, Aryl2 substituted by R10 and R11, phenyl substituted by R15,

wherein

Aryl3 is naphthyl, pyrazinyl, pyridazinyl, pyrimidinyl, quinazolinyl, quinoxalinyl, cinnolinyl, quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl, isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl or thiophenyl,

R15 is purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl,

oxazolyl, isoxazolyl, thiazolyl, isothiazolyl,
imidazolyl, pyrrolyl, pyrazolyl, furanyl or
thiophenyl,

R16 is hydrogen, hydroxyl, 1-4C-alkoxy, hydroxy-2-4C-alkoxy, 1-4C-alkoxy-2-4C-alkoxy, mono- or di-1-4C-dialkylamino, 1-4C-alkoxycarbonyl, amino, aminocarbonyl, mono- or di-1-4C-alkylaminocarbonyl, 1-4C-alkylcarbonyl, 1-4C-alkylcarbonylamino or -N(H)-C(O)-N(R18)R19,

Y represents a bond or -C(O)-,

Z represents a bond, -O-, -C(O)-, -C(O)-N(H)-, -N(H)-C(O)-, -N(R17)-, -S- or -S(O)₂-,

R17 is hydrogen or 1-4C-alkyl,

R18 and R19 are independent from each other hydrogen or 1-4C-alkyl, or R18 and R19 together, and with inclusion of the nitrogen atom to which they are bonded, form a 4-morpholinyl-, 1-pyrrolidinyl-, 1-piperidinyl-, 1-hexahydroazepino- or a 1-piperazinyl-ring,

n is an integer from 1 to 4,

m is an integer from 1 to 4,

p is an integer from 1 to 4,

q is an integer from 1 to 4,

r is an integer from 1 to 4,

or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof,

with the proviso that all those compounds of formula 1 are excluded in which Y and Z both represent a bond and simultaneously R16 is hydrogen, aminocarbonyl or mono- or di-1-4C-alkyl-aminocarbonyl, or in which Y represents -C(O)-, Z represents a bond and simultaneously R16 is hydrogen, amino or mono- or di-1-4C-alkylamino.

2. (Previously presented) A compound of formula 1 according to claim 1 selected from the group consisting of

(4aS,8aR)-2-{1-[3-(2-Amino-ethylsulfanyl)-propanoyl]-piperidin-4-yl}-4-(3,4-dimethoxy-phenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

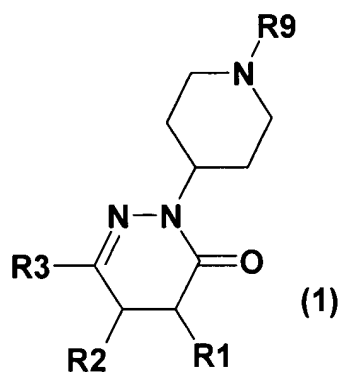
(4aS,8aR)-2-{1-[3-(2-Amino-ethylsulfonyl)-propanoyl]-piperidin-4-yl}-4-(3,4-dimethoxy-phenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

(4aS,8aR)-2-{1-[2-(2-Amino-ethoxy)-ethyl]-piperidin-4-yl}-4-(3,4-dimethoxy-phenyl)-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one,

and hydrates, solvates, salts, hydrates of the salts and solvates of the salts thereof.

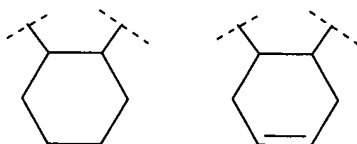
3. (Canceled)

4. (Currently amended) A compound of formula 1

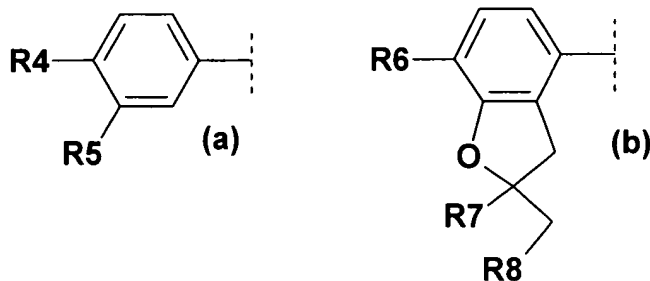


in which

R1 and R2 represent independently from one another hydrogen or 1-4C-alkyl, or R1 and R2 together, and with inclusion of the two carbon atoms to which they are bonded, form a group selected from



R3 represents a phenyl derivative of formulae (a) or (b)



wherein

R4 is 1-4C-alkoxy or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R5 is 1-8C-alkoxy, 3-7C-cycloalkoxy, 3-7C-cycloalkylmethoxy, or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R6 is 1-4C-alkoxy, 3-5C-cycloalkoxy, 3-5C-cycloalkylmethoxy, or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R7 is 1-4C-alkyl and

R8 is hydrogen or 1-4C-alkyl,

or wherein

R7 and R8 together, and with inclusion of the two carbon atoms to which they are bonded, form a spiro-linked 5-, 6- or 7-membered hydrocarbon ring, optionally interrupted by an oxygen or sulfur atom,

R9 is Aryl1, Aryl2 substituted by R10 and R11, $-(CH_2)_n-$
 $C(O)-R12$, $-C(O)-(CH_2)_m-R13$, $-(CH_2)_p-R14$ or $-Y-(CH_2)_q-Z-$
 $(CH_2)_r-R16$,

wherein

Aryl1 is naphthyl, pyrazinyl, pyridazinyl, pyrimidin-4-yl, pyrimidin-5-yl, quinazolinyl, quinoxalinyl, cinnolinyl, quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl, isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, isothiazolyl, pyrrolyl, pyrazolyl or thiophenyl,

Aryl2 is naphthyl, pyridyl, pyrazinyl, pyridazinyl, pyrimidinyl, quinazolinyl, quinoxalinyl, cinnolinyl, quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl, isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl or thiophenyl,

R10 is halogen, nitro, cyano, carboxyl, 1-4C-alkyl, trifluoromethyl, 1-4C-alkoxy, 1-4C-alkoxy which is completely or predominantly substituted by fluorine, 1-

4C-alkoxycarbonyl, amino, mono-or di-1-4C-alkylamino, aminocarbonyl, 1-4C-alkylcarbonylamino or mono-or di-1-4C-alkylaminocarbonyl,

R11 is hydrogen, halogen, amino, nitro, 1-4C-alkyl or 1-4C-alkoxy,

R12 is 4H-benzo[1,4]oxazin-3-one-6-yl, Aryl2 or Aryl2 substituted by R10 and R11,

R13 is 1-4C-alkoxy, phenoxy, naphthalenoxy or 2-oxo-1,2-dihydro-quinolin-6-yloxy,

R14 is Aryl 3, Aryl2 substituted by R10 and R11, phenyl substituted by R15,

wherein

Aryl3 is naphthyl, pyrazinyl, pyridazinyl, pyrimidinyl, quinazolinyl, quinoxalinyl, cinnolinyl, quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl, isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl or thiophenyl,

R15 is purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl,

oxazolyl, isoxazolyl, thiazolyl, isothiazolyl,
imidazolyl, pyrrolyl, pyrazolyl, furanyl or
thiophenyl,

R16 is hydrogen, hydroxyl, 1-4C-alkoxy, hydroxy-2-4C-alkoxy, 1-4C-alkoxy-2-4C-alkoxy, mono- or di-1-4C-dialkylamino, 1-4C-alkoxycarbonyl, aminocarbonyl, mono- or di-1-4C-alkylaminocarbonyl, 1-4C-alkylcarbonyl, 1-4C-alkylcarbonylamino or -N(H)-C(O)-N(R18)R19,

Y represents a bond or -C(O)-,

Z represents a bond, -O-, -C(O)-, -C(O)-N(H)-, -N(H)-C(O)-, -N(R17)-, -S- or -S(O)₂-,

R17 is hydrogen or 1-4C-alkyl,

R18 and R19 are independent from each other hydrogen or 1-4C-alkyl, or R18 and R19 together, and with inclusion of the nitrogen atom to which they are bonded, form a 4-morpholinyl-, 1-pyrrolidinyl-, 1-piperidinyl-, 1-hexahydroazepino- or a 1-piperazinyl-ring,

n is an integer from 1 to 4,

m is an integer from 1 to 4,

p is an integer from 1 to 4,

q is an integer from 1 to 4,

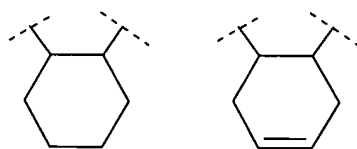
r is an integer from 1 to 4,

or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof,

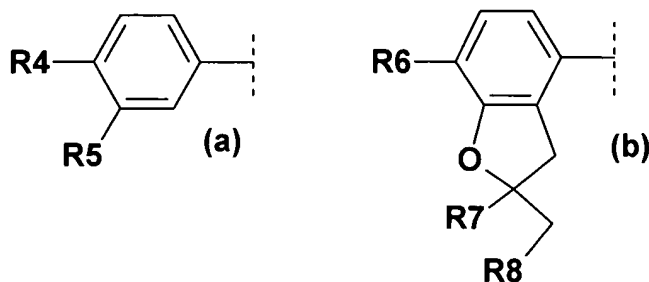
with the proviso that all those compounds of formula 1 are excluded in which Y and Z both represent a bond and simultaneously R16 is hydrogen, aminocarbonyl or mono- or di-1-4C-alkyl-aminocarbonyl, or in which Y represents -C(O)-, Z represents a bond and simultaneously R16 is hydrogen or mono- or -di-1-4C-alkylamino.

5. (Previously presented) A compound of formula 1 according to claim 4, in which

R1 and R2 represent independently from one another hydrogen or 1-4C-alkyl, or R1 and R2 together, and with inclusion of the two carbon atoms to which they are bonded, form a group selected from



R3 represents a phenyl derivative of formulae (a) or (b)



wherein

R4 is 1-2C-alkoxy or 1-2C-alkoxy which is completely or predominantly substituted by fluorine,

R5 is 1-4C-alkoxy,

R6 is 1-2C-alkoxy or 1-2C-alkoxy which is completely or predominantly substituted by fluorine,

R7 is methyl and

R8 is hydrogen,

or wherein

R7 and R8 together, and with inclusion of the two carbon atoms to which they are bonded, form a spiro-linked cyclopentane, cyclohexane, tetrahydrofurane or tetrahydropyran ring,

R9 is Aryl₁, Aryl₂ substituted by R₁₀ and R₁₁, $-(CH_2)_n-C(O)-R_{12}$, $-C(O)-(CH_2)_m-R_{13}$, $-(CH_2)_p-R_{14}$ or $-Y-(CH_2)_q-Z-(CH_2)_r-R_{16}$,

wherein

Aryl₁ is pyrimidin-4-yl, pyrimidin-5-yl, quinazolinyl, quinolyl, isoquinolyl, indolyl, indazolyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, isothiazolyl, pyrrolyl, pyrazolyl or thiophenyl,

Aryl₂ is pyridyl, pyrimidinyl, quinazolinyl, quinolyl, isoquinolyl, indolyl, indazolyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl or thiophenyl,

R₁₀ is halogen, nitro, cyano, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, amino, mono-or di-1-4C-alkylamino, aminocarbonyl, 1-4C-alkylcarbonylamino or mono-or di-1-4C-alkylaminocarbonyl,

R₁₁ is hydrogen, halogen, 1-4C-alkyl or 1-4C-alkoxy,

R₁₂ is 4H-benzo[1,4]oxazin-3-one-6-yl, Aryl₂ or Aryl₂ substituted by R₁₀ and R₁₁,

R₁₃ is phenoxy, naphthalenoxy or 2-oxo-1,2-dihydro-quinolin-6-yloxy,

R₁₄ is Aryl₃, Aryl₂ substituted by R₁₀ and R₁₁, phenyl substituted by R₁₅,

wherein

Aryl³ is pyrimidinyl, quinazolinyl, quinolyl, isoquinolyl, indolyl, indazolyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl or thiophenyl,

R¹⁵ is purinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, furanyl or thiophenyl,

Y represents a bond or -C(O)-,

Z represents a bond, -O-, -S- or -S(O)₂-,

R¹⁶ is hydrogen, hydroxyl, 1-4C-alkoxy, hydroxy-2-4C-alkoxy, 1-4C-alkoxy-2-4C-alkoxy or -N(H)-C(O)-N(R¹⁸)R¹⁹, wherein

R¹⁸ and R¹⁹ are independent from each other hydrogen or 1-4C-alkyl, or R¹⁸ and R¹⁹ together, and with inclusion of the nitrogen atom to which they are bonded, form a 4-morpholinyl-, 1-pyrrolidinyl- or 1-piperidinyl -ring,

n is an integer from 1 to 2,

m is an integer from 1 to 3,

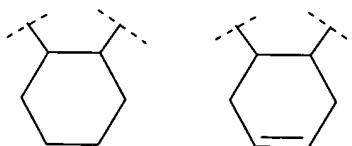
p is an integer from 1 to 2,

q is an integer from 1 to 3,

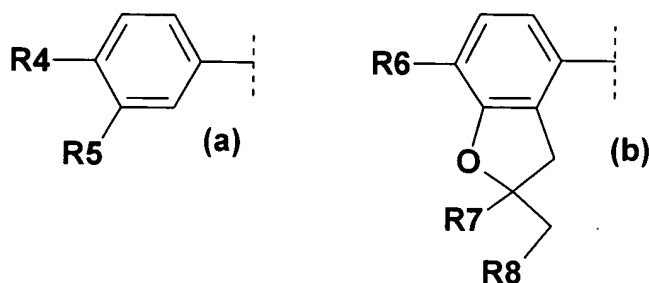
r is an integer from 1 to 2,
 or a hydrate, solvate, salt, hydrate of a salt or solvate
 of a salt thereof,
 with the proviso that all those compounds of formula 1 are
 excluded in which Y and Z both represent a bond and
 simultaneously R16 is hydrogen, or in which Y represents -
 C(O)-, Z represents a bond and simultaneously R16 is
 hydrogen.

6. (Previously presented) A compound of formula 1 according
 to claim 4 in which

R1 and R2 together, and with inclusion of the two carbon
 atoms to which they are bonded, form a group selected from



R3 represents a benzene derivative of formulae (a) or (b)



wherein

R4 is 1-2C-alkoxy,

R5 is 1-4C-alkoxy,

R6 is 1-2C-alkoxy,

R7 is methyl and

R8 is hydrogen,

R9 is $-(CH_2)_n-C(O)-R_{12}$, $-C(O)-(CH_2)_m-R_{13}$, $-(CH_2)_p-R_{14}$ or $-Y-(CH_2)_q-Z-(CH_2)_r-R_{16}$,

wherein

R12 is 4H-benzo[1,4]oxazin-3-one-6-yl or benzofuran-2-yl,

R13 is 2-oxo-1,2-dihydro-quinolin-6-yloxy,

R14 is phenyl substituted by R15,

wherein

R15 is benzimidazolyl,

Y represents a bond or $-C(O)-$,

Z represents a bond, $-O-$, $-S-$ or $-S(O)_2-$,

R16 is hydrogen, hydroxyl, methoxy, hydroxyethoxy, methoxyethoxy or $-N(H)-C(O)-N(R_{18})R_{19}$,

wherein

R18 and R19 together, and with inclusion of the nitrogen atom to which they are bonded, form a 4-morpholinyl-ring,

n is 1,

m is an integer from 1 to 3,

p is 1,

q is an integer from 1 to 2,

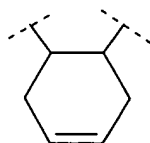
r is an integer from 1 to 2,

or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof,

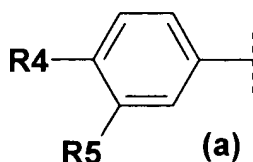
with the proviso that all those compounds of formula 1 are excluded in which Y and Z both represent a bond and simultaneously R16 is hydrogen, or in which Y represents -C(O)-, Z represents a bond and simultaneously R16 is hydrogen.

7. (Previously presented) A compound of formula 1 according to claim 4 in which

R1 and R2 together, and with inclusion of the two carbon atoms to which they are bonded, form the following group



R3 represents a phenyl derivative of formula (a)



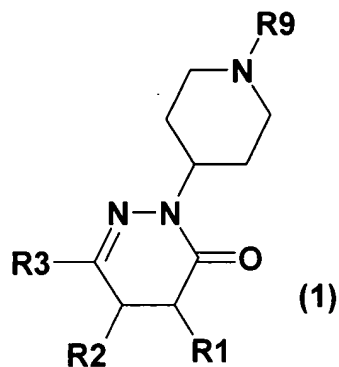
wherein

R4 is methoxy,

R5 is methoxy,

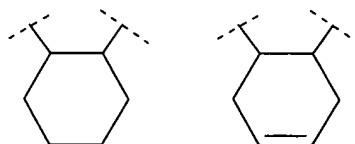
R9 is 2-(methanesulfonyl)ethanoyl, 2-benzofuran-2-yl-2-oxo-ethyl, 4-benzimidazol-1-ylbenzyl, 2-(4H-benzo[1,4]oxazin-3-one-6-yl)ethanoyl, 3-{2-[(1-morpholin-4-yl-methanoyl)-amino]-ethanesulfonyl}-propionyl, 2-(2-oxo-1,2-dihydroquinolin-6-yloxy)ethanoyl, 4-(2-oxo-1,2-dihydroquinolin-6-yloxy)butanoyl, 2-methoxyethyl, 2-methylsulfonyl, 2-methanesulfonyl, 2-methanesulfonyl or 2-(2-hydroxy-ethoxy)ethyl, or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

8. (Currently amended) A compound of formula 1,

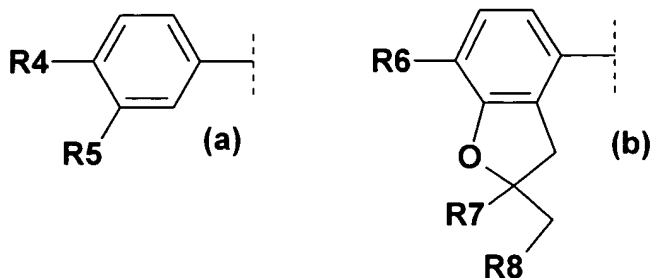


in which

R1 and R2 represent independently from one another hydrogen or 1-4C-alkyl, or R1 and R2 together, and with inclusion of the two carbon atoms to which they are bonded, form a group selected from



R3 represents a phenyl derivative of formulae (a) or (b)



wherein

R4 is 1-4C-alkoxy or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R5 is 1-8C-alkoxy, 3-7C-cycloalkoxy, 3-7C-cycloalkylmethoxy, or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R6 is 1-4C-alkoxy, 3-5C-cycloalkoxy, 3-5C-cycloalkylmethoxy, or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R7 is 1-4C-alkyl and

R8 is hydrogen or 1-4C-alkyl,

or wherein

R7 and R8 together, and with inclusion of the two carbon atoms to which they are bonded, form a spiro-linked 5-, 6- or 7-membered hydrocarbon ring, optionally interrupted by an oxygen or sulfur atom,

R9 is Aryl1, Aryl2 substituted by R10 and R11, $-(CH_2)_n-$
 $C(O)-R12$, $-C(O)-(CH_2)_m-R13$, $-(CH_2)_p-R14$ or $-Y-(CH_2)_q-Z-$
 $(CH_2)_r-R16$,

wherein

Aryl1 is naphthyl, pyrazinyl, pyridazinyl, pyrimidin-4-yl,
 pyrimidin-5-yl, quinazolinyl, quinoxalinyl, cinnolinyl,
 quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl,
 isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl,
 pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl,
 benzimidazolyl, oxazolyl, isoxazolyl, isothiazolyl,
 pyrrolyl, pyrazolyl or thiophenyl,

Aryl2 is naphthyl, pyridyl, pyrazinyl, pyridazinyl,
 pyrimidinyl, quinazolinyl, quinoxalinyl, cinnolinyl,
 quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl,
 isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl,
 pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl,
 benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl,
 isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl
 or thiophenyl,

R10 is halogen, nitro, cyano, carboxyl, 1-4C-alkyl,
 trifluoromethyl, 1-4C-alkoxy, 1-4C-alkoxy which is
 completely or predominantly substituted by fluorine, 1-

4C-alkoxycarbonyl, amino, mono-or di-1-4C-alkylamino, aminocarbonyl, 1-4C-alkylcarbonylamino or mono-or di-1-4C-alkylaminocarbonyl,

R11 is hydrogen, halogen, amino, nitro, 1-4C-alkyl or 1-4C-alkoxy,

R12 is 4H-benzo[1,4]oxazin-3-one-6-yl, Aryl2 or Aryl2 substituted by R10 and R11,

R13 is 1-4C-alkoxy, phenoxy, naphthalenoxy or 2-oxo-1,2-dihydro-quinolin-6-yloxy,

R14 is Aryl 3, Aryl2 substituted by R10 and R11, phenyl substituted by R15,

wherein

Aryl3 is naphthyl, pyrazinyl, pyridazinyl, pyrimidinyl, quinazolinyl, quinoxalinyl, cinnolinyl, quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl, isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl or thiophenyl,

R15 is purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl,

oxazolyl, isoxazolyl, thiazolyl, isothiazolyl,
imidazolyl, pyrrolyl, pyrazolyl, furanyl or
thiophenyl,

R16 is hydrogen, hydroxyl, 1-4C-alkoxy, hydroxy-2-4C-alkoxy, 1-4C-alkoxy-1-4C-alkoxy, mono- or di-1-4C-dialkylamino, 1-4C-alkoxycarbonyl, amino, aminocarbonyl, mono- or di-1-4C-alkylaminocarbonyl, 1-4C-alkylcarbonyl, 1-4C-alkylcarbonylamino or -N(H)-C(O)-N(R18)R19,

Y represents a bond or -C(O)-,

Z represents a bond, -O-, -C(O)-, -C(O)-N(H)-, -N(H)-C(O)-, -N(R17)-, -S- or -S(O)₂-,

R17 is hydrogen or 1-4C-alkyl,

R18 and R19 are independent from each other hydrogen or 1-4C-alkyl, or R18 and R19 together, and with inclusion of the nitrogen atom to which they are bonded, form a 4-morpholinyl-, 1-pyrrolidinyl-, 1-piperidinyl-, 1-hexahydroazepino- or a 1-piperazinyl-ring,

n is an integer from 1 to 4,

m is an integer from 1 to 4,

p is an integer from 1 to 4,

q is an integer from 1 to 4,

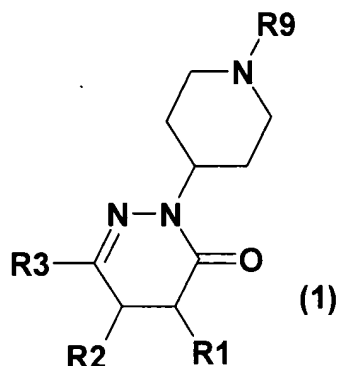
r is an integer from 1 to 4,

or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof,

with the proviso that all those compounds of formula 1 are excluded in which Y and Z both represent a bond and R16 is hydrogen.

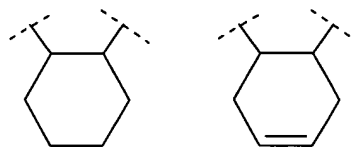
9. (Canceled)

10. (Currently amended) A compound of formula 1

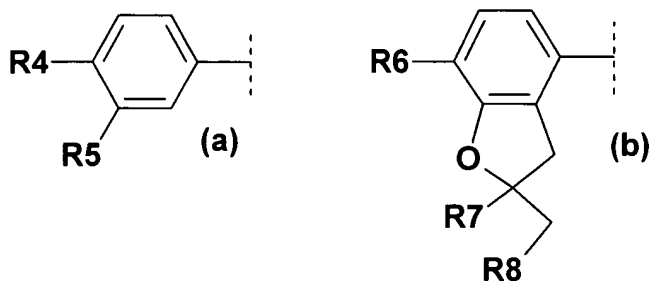


in which

R1 and R2 represent independently from one another hydrogen or 1-4C-alkyl, or R1 and R2 together, and with inclusion of the two carbon atoms to which they are bonded, form a group selected from



R3 represents a phenyl derivative of formulae (a) or (b)



wherein

R4 is 1-4C-alkoxy or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R5 is 1-8C-alkoxy, 3-7C-cycloalkoxy, 3-7C-cycloalkylmethoxy, or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R6 is 1-4C-alkoxy, 3-5C-cycloalkoxy, 3-5C-cycloalkylmethoxy, or 1-4C-alkoxy which is completely or predominantly substituted by fluorine,

R7 is 1-4C-alkyl and

R8 is hydrogen or 1-4C-alkyl,

or wherein

R7 and R8 together, and with inclusion of the two carbon atoms to which they are bonded, form a spiro-linked 5-, 6- or 7-membered hydrocarbon ring, optionally interrupted by an oxygen or sulfur atom,

R9 is Aryl1, Aryl2 substituted by R10 and R11, $-(CH_2)_n-C(O)-R12$, $-C(O)-(CH_2)_m-R13$, $-(CH_2)_p-R14$ or $-Y-(CH_2)_q-Z-(CH_2)_r-R16$,

wherein

Aryl1 is naphthyl, pyrazinyl, pyridazinyl, pyrimidin-4-yl, pyrimidin-5-yl, quinazolinyl, quinoxalinyl, cinnolinyl, quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl, isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, isothiazolyl, pyrrolyl, pyrazolyl or thiophenyl,

Aryl2 is naphthyl, pyridyl, pyrazinyl, pyridazinyl, pyrimidinyl, quinazolinyl, quinoxalinyl, cinnolinyl, quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl, isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl,

isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl or thiophenyl,

R10 is halogen, nitro, cyano, carboxyl, 1-4C-alkyl, trifluoromethyl, 1-4C-alkoxy, 1-4C-alkoxy which is completely or predominantly substituted by fluorine, 1-4C-alkoxycarbonyl, amino, mono-or di-1-4C-alkylamino, aminocarbonyl, 1-4C-alkylcarbonylamino or mono-or di-1-4C-alkylaminocarbonyl,

R11 is hydrogen, halogen, amino, nitro, 1-4C-alkyl or 1-4C-alkoxy,

R12 is 4H-benzo[1,4]oxazin-3-one-6-yl, Aryl2 or Aryl2 substituted by R10 and R11,

R13 is 1-4C-alkoxy, phenoxy, naphthalenoxy or 2-oxo-1,2-dihydro-quinolin-6-yloxy,

R14 is Aryl3, Aryl2 substituted by R10 and R11, phenyl substituted by R15,

wherein

Aryl3 is naphthyl, pyrazinyl, pyridazinyl, pyrimidinyl, quinazolinyl, quinoxalinyl, cinnolinyl, quinolyl, isoquinolyl, phthalazinyl, indanyl, indolyl, isoindolyl, indazolyl, chromanyl, isochromanyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl,

oxazolyl, isoxazolyl, thiazolyl, isothiazolyl,
imidazolyl, pyrrolyl, pyrazolyl, furanyl or
thiophenyl,

R15 is purinyl, pteridinyl, benzofuranyl,
benzoxazolyl, benzothiazolyl, benzimidazolyl,
oxazolyl, isoxazolyl, thiazolyl, isothiazolyl,
imidazolyl, pyrrolyl, pyrazolyl, furanyl or
thiophenyl,

R16 is hydrogen, hydroxyl, 1-4C-alkoxy, hydroxy-2-4C-
alkoxy, 1-4C-alkoxy-1-4C-alkoxy, mono- or di-1-4C-
dialkylamino, 1-4C-alkoxycarbonyl, aminocarbonyl, mono-
or di-1-4C-alkylaminocarbonyl, 1-4C-alkylcarbonyl, 1-4C-
alkylcarbonylamino or -N(H)-C(O)-N(R18)R19,

Y represents a bond or -C(O)-,

Z represents a bond, -O-, -C(O)-, -C(O)-N(H)-, -N(H)-
C(O)-, -N(R17)-, -S- or -S(O)₂-,

R17 is hydrogen or 1-4C-alkyl,

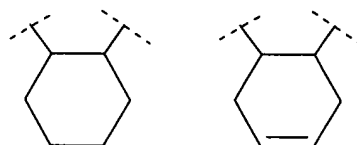
R18 and R19 are independent from each other hydrogen or
1-4C-alkyl, or R18 and R19 together, and with inclusion
of the nitrogen atom to which they are bonded, form a 4-
morpholinyl-, 1-pyrrolidinyl-, 1-piperidinyl-,
1-hexahydroazepino- or a 1-piperazinyl-ring,

n is an integer from 1 to 4,

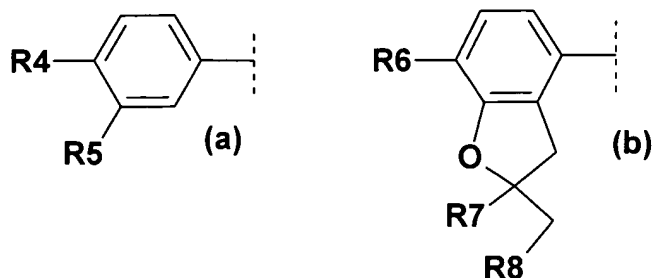
m is an integer from 1 to 4,
 p is an integer from 1 to 4,
 q is an integer from 1 to 4,
 r is an integer from 1 to 4,
 or a hydrate, solvate, salt, hydrate of a salt or solvate
 of a salt thereof,
 with the proviso that all those compounds of formula 1 are
 excluded in which Y and Z both represent a bond and R16 is
 hydrogen.

11.(Previously amended) A compound of formula 1 according
 to claim 4 in which

R1 and R2 represent independently from one another hydrogen
 or 1-4C-alkyl, or R1 and R2 together, and with inclusion of
 the two carbon atoms to which they are bonded, form a group
 selected from



R3 represents a phenyl derivative of formulae (a) or (b)



wherein

R4 is 1-2C-alkoxy or 1-2C-alkoxy which is completely or predominantly substituted by fluorine,

R5 is 1-4C-alkoxy,

R6 is 1-2C-alkoxy or 1-2C-alkoxy which is completely or predominantly substituted by fluorine,

R7 is methyl and

R8 is hydrogen,

or wherein

R7 and R8 together, and with inclusion of the two carbon atoms to which they are bonded, form a spiro-linked cyclopentane, cyclohexane, tetrahydrofuran or tetrahydropyran ring,

R9 is Aryl1, Aryl2 substituted by R10 and R11, $-(CH_2)_n-$ C(O)-R12, $-C(O)-(CH_2)_m-R13$, $-(CH_2)_p-R14$ or $-Y-(CH_2)_q-Z-(CH_2)_r-R16$,

wherein

Aryl1 is pyrimidin-4-yl, pyrimidin-5-yl, quinazolinyl, quinolyl, isoquinolyl, indolyl, indazolyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, isothiazolyl, pyrrolyl, pyrazolyl or thiophenyl,

Aryl2 is pyridyl, pyrimidinyl, quinazolinyl, quinolyl, isoquinolyl, indolyl, indazolyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl or thiophenyl,

R10 is halogen, nitro, cyano, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, amino, mono-or di-1-4C-alkylamino, aminocarbonyl, 1-4C-alkylcarbonylamino or mono-or di-1-4C-alkylaminocarbonyl,

R11 is hydrogen, halogen, 1-4C-alkyl or 1-4C-alkoxy,

R12 is 4H-benzo[1,4]oxazin-3-one-6-yl, Aryl2 or Aryl2 substituted by R10 and R11,

R13 is phenoxy, naphthalenoxy or 2-oxo-1,2-dihydro-quinolin-6-yloxy,

R14 is Aryl3, Aryl2 substituted by R10 and R11, phenyl substituted by R15,

wherein

Aryl³ is pyrimidinyl, quinazolinyl, quinolyl, isoquinolyl, indolyl, indazolyl, purinyl, pteridinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl or thiophenyl,

R¹⁵ is purinyl, benzofuranyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, furanyl or thiophenyl,

Y represents a bond or -C(O)-,

Z represents a bond, -O-, -S- or -S(O)₂-,

R¹⁶ is hydrogen, hydroxyl, 1-4C-alkoxy, hydroxy-2-4C-alkoxy, 1-4C-alkoxy-1-4C-alkoxy or -N(H)-C(O)-N(R¹⁸)R¹⁹,

wherein

R¹⁸ and R¹⁹ are independent from each other hydrogen or 1-4C-alkyl, or R¹⁸ and R¹⁹ together, and with inclusion of the nitrogen atom to which they are bonded, form a 4-morpholinyl-, 1-pyrrolidinyl- or 1-piperidinyl -ring,

n is an integer from 1 to 2,

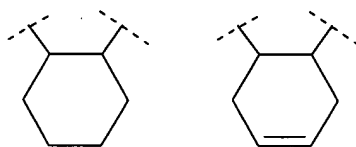
m is an integer from 1 to 3,

p is an integer from 1 to 2,

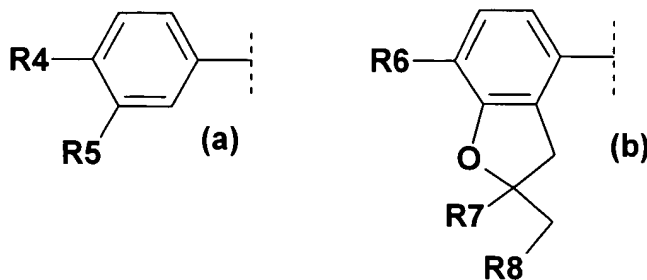
q is an integer from 1 to 3,

r is an integer from 1 to 2,
 or a hydrate, solvate, salt, hydrate of a salt or solvate
 of a salt thereof,
 with the proviso that all those compounds of formula 1 are
 excluded in which Y and Z both represent a bond and R16 is
 hydrogen.

12. (Previously presented) A compound of formula 1
 according to claim 4 in which
 R1 and R2 together, and with inclusion of the two carbon
 atoms to which they are bonded, form a group selected from



R3 represents a benzene derivative of formulae (a) or (b)



wherein

R4 is 1-2C-alkoxy,

R5 is 1-4C-alkoxy,

R6 is 1-2C-alkoxy,

R7 is methyl and

R8 is hydrogen,

R9 is $-(CH_2)_n-C(O)-R_{12}$, $-C(O)-(CH_2)_m-R_{13}$, $-(CH_2)_p-R_{14}$ or $-Y-(CH_2)_q-Z-(CH_2)_r-R_{16}$,

wherein

R12 is 4H-benzo[1,4]oxazin-3-one-6-yl or benzofuran-2-yl,

R13 is 2-oxo-1,2-dihydro-quinolin-6-yloxy,

R14 is phenyl substituted by R15,

wherein

R15 is benzimidazolyl,

Y represents a bond or $-C(O)-$,

Z represents a bond, $-O-$, $-S-$ or $-S(O)_2-$,

R16 is hydrogen, hydroxyl, methoxy, hydroxyethoxy, methoxyethoxy or $-N(H)-C(O)-N(R_{18})R_{19}$,

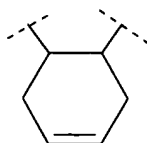
wherein

R18 and R19 together, and with inclusion of the nitrogen atom to which they are bonded, form a 4-morpholinyl-ring,

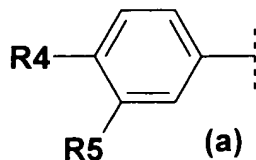
n is 1,

m is an integer from 1 to 3,
 p is 1,
 q is an integer from 1 to 3,
 r is an integer from 1 to 2,
 or a hydrate, solvate, salt, hydrate of a salt or solvate
 of a salt thereof,
 with the proviso that all those compounds of formula 1 are
 excluded in which Y and Z both represent a bond and R16 is
 hydrogen.

13. (Previously presented) A compound of formula 1
 according to claim 4 in which
 R1 and R2 together, and with inclusion of the two carbon
 atoms to which they are bonded, form the following group



R3 represents a phenyl derivative of formula (a)



wherein

R4 is methoxy,

R5 is methoxy,

R9 is 2-(methanesulfonyl)ethanoyl, 2-benzofuran-2-yl-2-oxo-ethyl, 4-benzimidazol-1-ylbenzyl, 2-(4H-benzo[1,4]oxazin-3-one-6-yl)ethanoyl, 2-(2-oxo-1,2-dihydroquinolin-6-yloxy)ethanoyl, 4-(2-oxo-1,2-dihydroquinolin-6-yloxy)butanoyl, 2-methoxyethyl, 2-methylsulfanylethyl, 2-methanesulfonylethyl or 2-(2-hydroxy-ethoxy)ethyl,

or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

14. (Previously presented) A compound of formula 1 according to claim 1, in which R1 and R2 together, and with inclusion of the two carbon atoms to which they are bonded, form a group selected from



and in which the hydrogen atoms in the positions 4a and 8a are cis-configured, or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

15. (Previously presented) A compound of formula 1 according to claim 14 in which the absolute configuration is S in the position 4a and R in the position 8a, or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

16. (Canceled)

17. (Previously presented) A pharmaceutical composition comprising one or more compounds of formula 1 according to claim 1, together with a pharmaceutical auxiliary or excipient.

18. (Canceled)

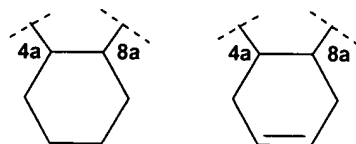
19. (Previously presented) A method for treating an illness treatable by the administration of a PDE4 inhibitor in a patient comprising administering to said patient in need thereof a therapeutically effective amount of a compound of formula 1 as claimed in claim 1, or a pharmaceutically acceptable hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

20. (Previously presented) A method for treating an illness treatable by the administration of a PDE4 inhibitor in a patient comprising administering to said patient in need thereof a therapeutically effective amount of a compound of formula 1 as claimed in claim 4, or a pharmaceutically acceptable hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

21. (Previously presented) A method for treating an airway disorder in a patient comprising administering to said patient in need thereof a therapeutically effective amount of a compound of formula 1 as claimed in claim 1, or a pharmaceutically acceptable hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

22. (Previously presented) A method for treating an airway disorder in a patient comprising administering to said patient in need thereof a therapeutically effective amount of a compound of formula 1 as claimed in claim 4, or a pharmaceutically acceptable hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

23. (Previously presented) A compound of formula 1 according to claim 4, in which R1 and R2 together, and with inclusion of the two carbon atoms to which they are bonded, form a group selected from

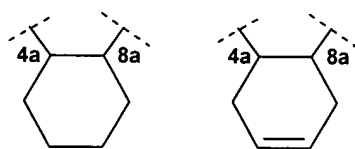


and in which the hydrogen atoms in the positions 4a and 8a are cis-configured, or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

24. (Previously presented) A compound of formula 1 according to claim 23 in which the absolute configuration is S in the position 4a and R in the position 8a, or a

hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

25. (Previously presented) A compound of formula 1 according to claim 8, in which R1 and R2 together, and with inclusion of the two carbon atoms to which they are bonded, form a group selected from

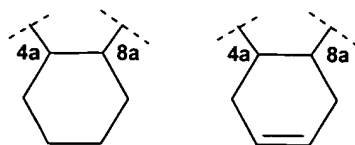


and in which the hydrogen atoms in the positions 4a and 8a are cis-configured, or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

26. (Previously presented) A compound of formula 1 according to claim 25 in which the absolute configuration is S in the position 4a and R in the position 8a, or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

27. (Previously presented) A compound of formula 1 according to claim 10, in which R1 and R2 together, and

with inclusion of the two carbon atoms to which they are bonded, form a group selected from



and in which the hydrogen atoms in the positions 4a and 8a are cis-configured, or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

28. (Previously presented) A compound of formula 1 according to claim 27 in which the absolute configuration is S in the position 4a and R in the position 8a, or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

29. (Previously presented) A pharmaceutical composition comprising one or more compounds of formula 1 according to claim 4, together with a pharmaceutical auxiliary or excipient.

30. (Previously presented) A pharmaceutical composition comprising one or more compounds of formula 1 according to

claim 8, together with a pharmaceutical auxiliary or excipient.

31. (Previously presented) A pharmaceutical composition comprising one or more compounds of formula 1 according to claim 10, together with a pharmaceutical auxiliary or excipient.

32. (Previously presented) A method for treating an illness treatable by the administration of a PDE4 inhibitor in a patient comprising administering to said patient in need thereof a therapeutically effective amount of a compound of formula 1 as claimed in claim 8, or a pharmaceutically acceptable hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

33. (Previously presented) A method for treating an illness treatable by the administration of a PDE4 inhibitor in a patient comprising administering to said patient in need thereof a therapeutically effective amount of a compound of formula 1 as claimed in claim 10, or a pharmaceutically acceptable hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

34. (Previously presented) A method for treating an airway disorder in a patient comprising administering to said patient in need thereof a therapeutically effective amount of a compound of formula 1 as claimed in claim 8, or a pharmaceutically acceptable hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

35. (Previously presented) A method for treating an airway disorder in a patient comprising administering to said patient in need thereof a therapeutically effective amount of a compound of formula 1 as claimed in claim 10, or a pharmaceutically acceptable hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.